**GATITU MIXED SECONDARY SCHOOL**

**BIOLOGY FORM 3 OPENER TERM 2 2015 EXAM**

1. Explain the following branches of biology
2. ecology 1mk
3. entomology 1mk
4. The scientific name for the black jack plant is Biden pilosa. Which taxonomic group does the name pilosa refer to? 1mk
5. Define binomial nomenclature. 2mks
6. Give functions to the following parts of microscope.
7. Base 1mk
8. Mirror 1mk
9. Highlight any two differences between the light and the electron microscope. 4mks
10. Define the term resolution as used in the observation of specimen. 2mks
11. Name the cell organelles that can be observed only under an electron microscope and for each state its functions. 4mks
12. State the requirements for the process of photosynthesis to occur. 2mks
13. Name the elements that form:
14. Carbohydrates 1mk
15. Proteins 1mk
16. List two components of the pancreatic juice. 2mks
17. Explain the most likely effect on digestion if the small intestine of a human is reduced in an operation. 2mks
18. Explain how the following plant adaptations minimize rate of respiration. 4mks
19. Leaf folding
20. Sunken stomata
21. Distinguish between:
22. Open and closed circulation 2mks
23. Single and double circution 2mks
24. Name one group of organisms that has a closed circulatory system. 1mk
25. What are the advantages and disadvantages of having blood group O? 2mks
26. What is the advantage of having blood group AB? 1mk
27. What is meant by the term gaseous exchange? 2mks
28. Give one environmental factor influencing the opening and closing of the stomata. 1mk
29. What three characteristics are used to divide the arthropod into classes? 3mks
30. Name the kingdom to which amoeba belongs. 1mk
31. Define the term moulting. 2mks
32. Give the differences between the following terms.
33. A niche and a habitat. 2mks
34. Predation and parasitism. 2mks